

REMARKS/ARGUMENTS

Applicant has carefully reviewed and considered the Office Action mailed on December 20, 2005, and the references cited therewith.

Claims 1, 3, 23, and 25 are amended, claim 8 is canceled, and no claims are added; as a result, claims 1-7, and 9-33 are now pending in this application.

Examiner Interview

Applicant gratefully acknowledges that Examiners Gleitz and Tran participated in a telephone interview on February 2, 2006, concerning claim language that could better articulate embodiments of the present disclosure. Following the telephone interview, Applicant has endeavored to implement into amendments of appropriate claims the constructive suggestions offered therein.

§ 102 Rejection of the Claims

Claims 1-6, 9-19, 23-26, and 29-33 were rejected under 35 USC § 102(b) as being anticipated by Fuji (U.S. Patent No. 4,977,431). Applicant respectfully traverses the rejection as follows.

With regard to independent claim 1, as amended, the Fuji reference appears to describe, “[a]n on-off means 47 turning on or off the heater 31 of the above-mentioned external heating apparatus 30 based on the trigger signal from the comparator 43.” (Col. 4, lines 30-33). When the heater is turned off, it is apparently completely turned off because, according to column 5, lines 31-42:

[W]hen the temperature of the first detecting means 41 is 165° C. and the temperature of the second detecting means 42 reaches about 205° C., the combined value of the parallel resistances becomes equal to the above-mentioned reference combined value of the parallel resistances, and the divided voltage V agrees with the reference voltage Vs, and therefore the comparator 43 stops output of the trigger signal. Accordingly, the transistor 45 and the triac 44 are put in the non-conductive state, and the heater 31 is turned off, being put in the terminate heating state (refer to t1).

The reference does not show reducing heat provided by the heater, by decreasing a voltage and power that remains positive while being applied to the heater, when a

temperature of the heater, the fuser roller, and the pressure roller is determined to be above a predetermined temperature.

In contrast, Applicant's independent claim 1, as amended, recites:

[r]educe heat provided by the heater by decreasing a voltage and power that remains positive while being applied to the heater when a temperature of the heater, the fuser roller, and the pressure roller is determined to be above a predetermined temperature.

In addition, independent claim 23, as amended, recites:

[r]educing heat provided by the heater by decreasing a voltage and power that remains positive while being applied to the heater when a temperature of the heater, the fuser roller, and the pressure roller is determined to be above a predetermined temperature.

Hence, unlike Fuji only having two states for the heater, i.e., being completely on or off, the present disclosure describes a third transition state in which the temperature of the heater is controlled by decreasing or increasing the voltage and power, which remains positive throughout decreasing a voltage and power to reduce heat provided by the heater.

Additionally, as described in the excerpt from Fuji provided above, and also in the third elements of both independent claims of Fuji, e.g., claims 1 and 5, the reference requires determination of a combined value of parallel resistances, which is essentially comparison of the temperatures of a first and a second detecting means. The two detecting means are associated with either the heat roller (col. 3, lines 55-58) and the external heating apparatus (col. 4, lines 15-17) or the heat roller and the press roller (col. 6, lines 39-47). This contrasts with the present disclosure, in which "[a] temperature of the heater, the fuser roller, and the pressure roller is determined to be above a predetermined temperature", as recited in independent claims 1 and 23, as amended. That is, whereas Fuji is measuring the temperature of two sources to determine whether to turn the heater on or off, the present disclosure measures the temperature of three sources, i.e., the heater, the fuser roller, and the pressure roller, to determine whether to reduce or increase the temperature of the heater.

As such, Applicant respectfully submits that each and every element and limitation of independent claims 1 and 23, as amended, is not present in the Fuji

reference. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the 102 rejection of independent claims 1 and 23, as amended, as well as those claims that depend therefrom.

§103 Rejection of the Claims

Claims 7, 20, 21, 27 and 28 were rejected under 35 USC § 103(a) as being unpatentable over Fuji (U.S. Patent No. 4,977,431) in view of Anthony et al. (U.S. Publication 2003/0021611). Applicant respectfully traverses the rejection as follows.

Claims 7, 20, and 21 depend from independent claim 1 and claim 27 depends from independent claim 23. Applicant respectfully submits that independent claims 1 and 23, as amended, are in condition for allowance in view of Fuji. From Applicant's review of the Anthony reference, the reference does not cure the deficiencies of the Fuji reference. That is, Anthony does not describe, teach, or suggest, "[r]educe heat provided by the heater, by decreasing a voltage and power that remains positive while being applied to the heater, when a temperature of the heater, the fuser roller, and the pressure roller is determined to be above a predetermined temperature", as recited in independent claim 1, as amended. Nor does Anthony describe, teach, or suggest, "[r]educing heat provided by the heater, by decreasing a voltage and power that remains positive while being applied to the heater, when a temperature of the heater, the fuser roller, and the pressure roller is determined to be above a predetermined temperature", as recited in independent claim 23, as amended.

As such, Applicant respectfully submits that each and every element and limitation of independent claims 1 and 23 is not described, taught, or suggested in the Fuji and Anthony references, either individually or in combination. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the 103 rejection of dependent claims 7, 20, 21, 27 and 28.

Claim 22 was rejected under 35 USC § 103(a) as being unpatentable over Fuji (U.S. Patent No. 4,977,431) in view of Yamamoto et al. (JP 04-204858). Applicant respectfully traverses the rejection as follows.

Claim 22 depends from independent claim 1. Applicant respectfully submits that independent claim 1, as amended, is in condition for allowance in view of Fuji. From Applicant's review of the Yamamoto reference, the reference does not cure the deficiencies of the Fuji reference. That is, Yamamoto does not describe, teach, or suggest, "[r]educe heat provided by the heater, by decreasing a voltage and power that remains positive while being applied to the heater, when a temperature of the heater, the fuser roller, and the pressure roller is determined to be above a predetermined temperature", as recited in independent claim 1, as amended.

As such, Applicant respectfully submits that each and every element and limitation of independent claim 1 is not described, taught, or suggested in the Fuji and Yamamoto references, either individually or in combination. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the 103 rejection of dependent claim 22.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney Gregg W. Wisdom at (360) 212-8052 to facilitate prosecution of this matter.

At any time during the pendency of this application, please charge any additional fees or credit overpayment to the Deposit Account No. 08-2025.

CERTIFICATE UNDER 37 CFR §1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: **MS AMENDMENT** Commissioner for Patents, P.O. BOX 1450, Alexandria, VA 22313-1450 on this 17th day of February, 2006.

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Date: 2/17/06